

Below is text to be added to last sentence of last paragraph on web page:
http://hi.water.usgs.gov/studies/project_source_tracking.html

Results from the Kaelepulu Pond surveys may be accessed by clicking here.

Below is text for new web page:

Wastewater and Nutrient Source Tracking, Kaelepulu Pond, Oahu, Hawaii

Wastewater and nutrient source tracking surveys were made in Kaelepulu Pond, Kaelepulu Canal to its outlet at Kailua Beach, and Hamakua Canal to its head at Kawainui Marsh levee in cooperation with the State of Hawaii Department of Health on July 22-24 and 28-30, 2008.

The surveys were made during "fair-weather" conditions via kayak and included: (1) trolling with a multiparameter water-quality sonde, and (2) water-column sampling at about 10 centimeters beneath the water surface. [Click here](#) to download location map (PDF File 2.6 MB).

Water samples were analyzed for nutrients, pharmaceuticals, and waste-indicator compounds and are the most diagnostic for wastewater presence and nutrient-source inference because of low detection levels of the laboratory analyses. Nutrient concentrations and speciation are highly subject to biotic processes and time of day. Forty samples were analyzed for nutrients and stable isotopes, 20 for pharmaceuticals, and 10 for waste-indicator compounds. A sample of tap water (sample 41) was also analyzed for stable isotopes to define the municipal-supply end-member. [Click here](#) to download data for water samples (PDF File 17 KB).

Specific conductance and fluorescence measurements were made on all 40 water samples. These measurements allow only modest inference by documenting fresher-water inflows and the possible presence of laundry fabric brighteners (although the fluorometer also responds to dissolved organic matter likely to be present at significant concentrations in the pond and canals). [Click here](#) to download specific conductance and fluorescence data (Excel File 28 KB).

Measurements made with the multiparameter water-quality sonde are possibly the least diagnostic for wastewater and nutrient inference, but they add the supporting value of denser and more continuous spatial patterns and document the status of near-surface water quality on the dates surveyed. [Click here](#) to download data collected with the water-quality sonde (Excel File 246 KB).